

**STATE WATER CONTROL BOARD ENFORCEMENT ACTION
SPECIAL ORDER BY CONSENT
ISSUED TO
THE CITY OF ROANOKE
FOR
THE ROANOKE REGIONAL WATER POLLUTION CONTROL PLANT
(VPDES Permit No. VA0025020)**

SECTION A: Purpose

This is a Consent Special Order issued under the authority of Va. Code §62.1-44.15(8a) by the State Water Control Board to the City of Roanoke for the purpose of resolving certain alleged violations of State Water Control Law and the Regulations.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. “Va. Code” means the Code of Virginia (1950), as amended.
2. “Board” means the State Water Control Board, a permanent citizens’ board of the Commonwealth of Virginia as described in Va. Code §§ 62.1-44.7 and 10.1-1184.
3. “Department” or “DEQ” means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Va. Code § 10.1-1183.
4. “Director” means the Director of the Department of Environmental Quality.
5. “Order” means this document, also known as a Consent Special Order.
6. “Plant” means the Roanoke Regional Water Pollution Control Plant, which operates under VPDES

Permit No. VA0025020.

7. "WCRO" means the West Central Regional Office of DEQ, located in Roanoke, Virginia.
8. "Permit" means VPDES Permit No. VA0025020, which was reissued to the City of Roanoke to operate the Roanoke Regional Water Pollution Control Plant on February 18, 1999.
9. "Regulations" means the Permit Regulation, 9 VAC 25-31-10 *et seq.*
10. "City" means the City of Roanoke, Virginia.
11. "Inflow and Infiltration" or "I&I" means non-sewage waters entering the sanitary sewer system.
12. "VDH" or "Health Department" means the Virginia Department of Health.
13. "Bypass", as defined at 9 VAC 25-31-10, means the intentional diversion of waste streams from any portion of a treatment facility.
14. "Overflow" means a discharge of wastewater from a sanitary sewer collection or transmission system.

SECTION C: Department's Findings of Fact and Conclusions of Law

1. On August 10, 1992, the City entered into a consent special order ("1992 Order") with the Board. The 1992 Order included provisions for I&I reduction. On April 30, 1997, the 1992 Order was amended ("1997 Amendment"). The 1997 Amendment included interim effluent limitations and a facility upgrade schedule for the Plant. The facility upgrade was intended to increase the capacity of the Plant from 35 million gallons per day ("MGD") to 62 MGD. On December 10, 1999, the Board issued another order ("1999 Order") that superceded the requirements of the 1992 Order and the 1997 Amendment. The 1999 Order extended the deadlines for completion of the facility upgrade and I&I reduction projects required under the 1997 Amendment. The Plant upgrade and expansion completion deadline under the 1999 Order was February 15, 2000. The I&I reduction project completion deadline under the 1999 Order was May 1, 2000.
2. Although upgrades to the Plant were completed as of the deadline in the 1999 Order, the upgrades did not result in the expected increase in capacity.
3. The Plant bypassed via outfall 003 on July 24-27, 2000, July 30, 2000, September 1 and 19, 2000, March 22, 2001, March 30, 2001, May 22-25, 2001, August 2 and 24, 2001, and March 19, 2002.

4. On August 31, 2000, VDH and DEQ issued a Certificate to Operate (“CTO”) for operation of the Plant as a 42-MGD facility. In early 2001, the City performed a capacity evaluation of the Plant. The results of that evaluation are reported in a document dated May 7, 2001 prepared by Ronald E. Benson, Ph.D, P.E., titled *Capacity Evaluation Study City of Roanoke Water Pollution Control Plant*. That study indicated that under ideal conditions the Plant may be able to treat 52 MGD.
5. On October 27, 2000, the Department issued Notice of Violation (“NOV”) No. 00-10-WCRO-020 to the City. Violations alleged by the NOV included overflows, bypasses, and effluent limit violations. On July 19, 2001, the Department issued NOV No. W2001-07-WCRO-006 to the City. Violations alleged by the NOV included overflows, bypasses, and effluent limit violations. On November 20, 2001, the Department issued NOV No. W2001-11-W-0006. Violations alleged by the NOV included bypasses.
6. This Order addresses issues related to alleged bypasses and alleged effluent limits violations at the Plant.

SECTION D: Agreement and Order

Accordingly, the State Water Control Board, by virtue of the authority granted it in §62.1-44.15(8a), orders the City, and the City agrees to perform the actions described in Appendix A of this Order. The Board and the City understand and agree that the purpose of the activities required under Appendix A of this Order is to prevent bypass discharges except as provided in Part II.U of the Permit and at 9 VAC 25-31-190.M and that improvements planned by the City under Appendix A shall be designed to prevent unauthorized bypasses. Such improvements shall include increases in both treatment and equalization capacities. The Board and the City understand and agree that the interim limits specified in Appendix B of this Order and the authorization for bypasses as specified in Paragraph 1 of Appendix A of this Order expire no later than February 18, 2004.

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of the City, for good cause shown by the City, or on its own motion after notice and opportunity to be heard.
2. This Order only addresses and resolves those alleged violations relating to bypasses and effluent limit violations specifically identified herein, including those addressed in NOV No. 00-10-WCRO-020, NOV No. W2001-07-WCRO-006, and NOV No. W2001-11-W-0006. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (a) taking any action authorized by law regarding any additional, subsequent, or

subsequently discovered violations; (b) seeking subsequent remediation of the facility as may be authorized by law; or (c) taking subsequent action to enforce this Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein.

3. For purposes of this Order and subsequent actions with respect to this Order, the City admits the jurisdictional allegations in this Order, but does not admit the factual allegations or legal conclusions contained herein. The Department and the City agree that the actions undertaken by the City in accordance with this consent order do not constitute an admission of any liability by the City. The City does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Order, the validity of the Statement of Facts or Determinations contained in Section C of this Order.
4. The City declares it has received fair and due process under the Administrative Process Act, Va. Code §§ 9-6.14:1 *et seq.* and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board or the Director to enforce this Order.
5. Failure by the City to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
6. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
7. The City shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. The City shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. The City shall notify the WCRO Regional Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of this Order. Such notice shall set forth:
(a) the reasons for the delay or noncompliance; (b) the projected duration of any such delay or noncompliance; (c) the measures taken and to be taken to prevent or minimize such delay or noncompliance; and (d) the timetable by which such measures will be implemented and the date full compliance will be achieved. Failure to so notify the WCRO Regional Director within forty-eight hours of learning of any condition above, which the parties intend to assert will result in the

Special Order by Consent

City of Roanoke - Roanoke Regional Water Pollution Control Plant

impossibility of compliance, shall constitute a waiver of any claim of inability to comply with a requirement of this Order.

8. This Order is binding on the parties hereto, their successors in interest, designees and assigns, jointly and severally.
9. This Order shall become effective upon execution by both the Director or his designee and the City. Notwithstanding the foregoing, the City agrees to be bound by any compliance date that precedes the effective date of this Order.
10. This Order shall continue in effect until either: a) the City petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of this order, or b) the Director or Board terminates the Order in his or its sole discretion upon 30 days written notice to the City. Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve the City from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.
11. By its signature below, the City voluntarily agrees to the issuance of this Order.

And it is so ORDERED this day of _____, 2002.

Robert G. Burnley, Director
Department of Environmental Quality

Commonwealth of Virginia

City/County of _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2002,

by _____, who is _____ of the
Department of Environmental Quality, on behalf of said Department.

Notary Public

Page 6 of 11
Special Order by Consent
City of Roanoke - Roanoke Regional Water Pollution Control Plant

My commission expires: _____

The City of Roanoke voluntarily agrees to the issuance of this Order.

By: _____

Date: _____

Commonwealth of Virginia

City/County of _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2002,

by _____, who is _____ of the
City of Roanoke, on behalf of said City.

Notary Public

My commission expires: _____

APPENDIX A

1. The following conditions are applicable to bypass discharges from PS003 at the Plant:
 - a. A bypass discharge occurring before February 18, 2004, when the estimated average daily influent flow for the previous 72 hours was less than or equal to 42 MGD, shall be deemed a violation of this Order, except as provided in Part II.U of the Permit and at 9 VAC 25-31-190.M.
 - b. Not later than May 1, 2002, the City shall submit to DEQ for review and approval a plan for monitoring plant operations preceding, during, and subsequent to bypasses. Upon written approval of that plan by DEQ, the City shall comply with the approved plan. In addition, the City shall perform measurements of fecal coliform and the kilograms of BOD₅, TKN, TP, and TSS discharged via outfall 003. Such measurements shall be grab samples only but shall conform to analysis requirements contained in the Permit. The City is only required to collect one sample of each parameter per day per event. The City shall have 10 days after the last day of bypass to submit the data from this sampling and the information required by the bypass-monitoring plan. The Department agrees that any such data collected by the City under the terms of this Paragraph shall not be included in the regular monthly operating reports sent to the Department but shall be sent under a separate cover letter. The City is not required to continue sampling of Outfall 003 after February 18, 2004.
2. Effluent limitations in effect at outfall 001 for the term of this Order are as follows:
 - a. The City shall comply with the effluent limitations specified in the Permit when the estimated average daily influent flow in a given month is less than or equal to 42 MGD.
 - b. The City shall comply with the effluent limitations specified in Appendix B of this Order when the estimated average daily influent flow in a given month is greater than 42 MGD.
3. The following actions shall be completed with respect to disinfection of bypasses from outfall 003:
 - a. Not later than April 1, 2002, the City shall submit for review and approval a plan describing bypass disinfection.
 - b. Within 60 days of issuance of a Certificate to Construct ("CTC") by VDH for bypass disinfection, the City shall complete construction of the disinfection method.
 - c. Within 5 days of completion of construction, the City shall submit a written completion

notice and Certificate to Operate (“CTO”) issuance request to VDH and DEQ.

- d. Upon issuance of the CTO by VDH for the disinfection method, the City shall disinfect any bypass discharged via outfall 003 by that method.
4. The following actions shall be completed with respect to measures intended to increase both treatment and equalization capacities of the Plant:
 - a. Not later than April 1, 2002, the City shall submit for review and approval a capacity and equalization improvement measures Preliminary Engineering Report (“PER”).
 - b. Not later than March 15, 2003, the City shall submit for review and approval draft (90% complete) plans for capacity and equalization improvement measures
 - c. Not later than May 1, 2003, the City shall submit for review and approval final Plans and Specifications (“P&S”) for capacity and equalization improvement measures.
 - d. The City may submit a request for amendment to this Order after a CTC has been issued by VDH for the capacity and equalization improvement measures.
 - e. Not later than September 1, 2003, the City shall commence construction of capacity and equalization improvement measures. If a CTC has not been issued by VDH by June 1, 2003, then the City may request an extension from the Department of the commencement of construction deadline. The extension requested by the City may consist of the addition of one calendar day to the September 1, 2003 deadline to commence construction of capacity and equalization measures for each calendar day past June 1, 2003 until the actual date the CTC is issued.
5. By July 1, 2002, the City shall submit a written report that: i) identifies the location of each flow metering device in its sewage collection system, ii) identifies flow meters with upper capacity limits insufficient to accurately record high flow, and iii) designates locations within its collection system to install flow meters to measure flow within the City’s collection system.
6. By October 1, 2002, the City shall install flow meters in its sewage collection system that are capable of accurately recording normal and expected high flows at the locations identified in its report required under Paragraph 5 above.
7. By October 1, 2002, the City shall upgrade all flow metering devices in the sewage collection system so that the flow meters are capable of accurately recording normal and expected high flows entering the City’s collection system from the City of Salem, the Town of Vinton, and the Counties of Roanoke and Botetourt.

8. The City shall submit a letter reporting progress on compliance with items required herein on January 10, April 10, July 10, and October 10 of each year. The last quarterly progress report will be due on January 10, 2004.
9. All items required to be submitted by this Order shall be submitted concurrently to VDH and to the West Central Regional Office of DEQ.

The remainder of this page is intentionally left blank

APPENDIX B**B. INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. As specified at Appendix A, Paragraph 2 of this Order, during the period beginning with the effective date of this Order and lasting until such time as either a CTO for a 62 MGD facility is issued, the Permit is modified or reissued with new final limits, or February 18, 2004, whichever comes first, the permittee is authorized to discharge from outfall serial number 001. The City shall comply with the effluent limitations specified in the Permit when average daily influent flows in a given month are less than or equal to 42 MGD. The City shall comply with the effluent limitations specified below when average daily influent flow in a given month is greater than 42 MGD.

Such discharges shall be limited and monitored by the permittee as specified below:

DISCHARGE LIMITATIONS MONITORING REQUIREMENTS

<u>EFFLUENT CHARACTERISTICS</u>	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Minimum</u>	<u>Maximum</u>	<u>Frequency</u>	<u>Sample Type</u>
Flow, (MGD) ⁽²⁾	NL	NA	NA	NL	Continuous	T/I/R
pH (Standard Units)	NA	NA	6.5	9.0	1/Day	Grab
BOD ₅ 24 HC	5.0 mg/l	7.5 mg/l		NA NL		1/Day
Total Suspended Solids 24 HC	2.5 mg/l	5.0 mg/l		NA NL		1/Day
Fecal Coliform (N/100 ml)	200*	NA	NA	NL	1/Day	Grab
Dissolved Oxygen (mg/l)	NA	NA	6.0	NL	1/Day	Grab
Total Phosphorus 24 HC	0.2 mg/l	0.3 mg/l		NA NL		1/Day
Cyanide, Total (as CN)	8.1 µg/l	10.0 µg/l	NA	NL	2D/Month	Grab
Total Kjeldahl Nitrogen (April – Sept.) 24 HC	2.0 mg/l	3.0 mg/l		NA NL		1/Day
Total Kjeldahl Nitrogen (Oct. - March) 24 HC	4.0 mg/l	5.0 mg/l		NA NL		1/Day
Nickel, Total Recoverable	29.6 µg/l	36.4 µg/l	NA	NL	2D/Month	24 HC
Chromium, Hexavalent	7.7 µg/l	9.5 µg/l	NA	NL	2D/Month	Grab
Mercury, Total Recoverable	0.014 µg/l	0.018 µg/l	NA	NL	2D/Month	24 HC
Selenium, Total Recoverable	5.1 µg/l	6.2 µg/l	NA	NL	2D/Month	24 HC
Total Residual Chlorine (TRC) ³	3.1 µg/l	3.9 µg/l	NA	NL	1/Day	Grab

T/I/R = Totalizing, Indicating, Recording; NA = Not applicable; NL = No Limitation, monitoring required; 24 HC = 24 hour composite

Special Order by Consent

City of Roanoke - Roanoke Regional Water Pollution Control Plant

* Geometric Mean

2. The design flow of this treatment facility is 42 MGD.
3. See Part I.B of the Permit for additional TRC limitations and monitoring requirements.
4. See Part I.C of the Permit for Quantification Levels and Reporting requirements for metals, cyanide, and TRC.
5. See Part I.G.5 of the Permit for additional monitoring requirements.
6. There shall be no discharge of floating solids or visible foam in other than trace amounts.